



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,838	10/24/2003	Galen C. Hunt	MSI-1778US	1011
22801	7590	04/07/2009	EXAMINER	
LEE & HAYES, PLLC 601 W. RIVERSIDE AVENUE SUITE 1400 SPokane, WA 99201			BATES, KEVIN T	
ART UNIT	PAPER NUMBER			
		2456		
MAIL DATE	DELIVERY MODE			
04/07/2009	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/693,838	Applicant(s) HUNT ET AL.
	Examiner KEVIN BATES	Art Unit 2456

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 January 2009.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-17 and 20-47 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,4-17 and 20-47 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/136/08)
 Paper No(s)/Mail Date 1-23-09
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) Notice of Informal Patent Application
 6) Other: _____

Response to Amendment

This Office Action is in response to a communication received on January 23, 2009.

The Information Disclosure Statement filed January 23, 2009 has been considered, except where crossed out because no English abstract has been provided.

Claims 1, 17, 25, and 42 are currently amended.

Claims 2-3 and 18-19 have been cancelled.

Claims 1, 4-17, and 20-47 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-17, and 20-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graupner (7035930) in view of Abu El Atu (6311144).

Regarding claims 1, 17, and 25, Graupner teaches a method comprising:
using a system definition model design the system (Col. 5, lines 7 – 16), wherein the system is an application (Col. 3, lines 4 – 11);
subsequently using the system definition model in a deployment phase of the system to deploy the system on one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and

after deployment of the system, using the system definition model in a management phase of the system to manage the system deployed on the one or more computing devices (Col. 8, lines 4 – 17).

Graupner does not explicitly indicate the creating of the system definition model as the system is being designed.

Abu El Ata teaches a modeling system that includes modeling and simulating systems that are being designed and proposed, and prior to any deployment of the actual application and system (Col. 3, lines 39-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Graupner's system of optimization of a distributed application can also be applied to distributed application still in the design and proposition phase of development.

Regarding claim 31, Graupner teaches a system comprising:
a processor; and a plurality of executable instructions which, when executed by the processor, perform operations comprising:

using a system definition model in a development phase of a system to design the system, the system being applicable across a lifecycle of the application, wherein the lifecycle of the application includes deployment of the application and management of the application (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17);

subsequently using the system definition model to deploy the system on one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and

after deployment of the system, using the system definition to manage the system deployed on the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and

wherein the system further includes a schema to dictate how functional operations within the system definition model are to be specified (Col. 7, lines 54 - 59).

Graupner does not explicitly indicate the creating of the system definition model as the system is being designed.

Abu El Ata teaches a modeling system that includes modeling and simulating systems that are being designed and proposed, and prior to any deployment of the actual application and system (Col. 3, lines 39-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Graupner's system of optimization of a distributed application can also be applied to distributed application still in the design and proposition phase of development.

Regarding claim 42, Graupner teaches a method comprising:

A system definition model that is specific to the system wherein the system is an application (Col. 5, lines 7 – 16; Col. 3, lines 4 – 11);

subsequently using the system definition model in a deployment phase of the system to deploy the system on one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and

after deployment of the system, using the system definition model in a management phase of the system to manage the system deployed on the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17);

using another system definition model to design an environment, wherein the system is deployed to the environment on the one or more computing devices (Col. 3, lines 20 – 26);

subsequently using the other system definition model to deploy the environment one the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and

after deployment of the environment, using the other system definition model to manage the environment deployed on the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17);

wherein the system definition model includes constraints that must be satisfied by the environment in order for the system to be run on the one or more computer device, and wherein the other system model definition model includes other constraints that must be satisfied by the system in order for the system to be run on the one or more computer devices (Col. 5, lines 17-36).

Graupner does not explicitly indicate the creating of the system definition model as the system is being designed.

Abu El Ata teaches a modeling system that includes modeling and simulating systems that are being designed and proposed, and prior to any deployment of the actual application and system (Col. 3, lines 39-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Graupner's system of optimization of a distributed application can also be applied to distributed application still in the design and proposition phase of development.

Regarding claim 4, Graupner teaches a method as recited in claim 1; using knowledge obtained during management of the system to design a subsequent version of the system (Col. 8, lines 4 – 17).

Regarding claims 5, 20, 26, 32, and 43, Graupner teaches a method as recited in claims 1, 17, 25, 31, and 42, wherein the system definition model includes knowledge describing how to deploy the system on the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17).

Regarding claims 6, 21, 27, 33, and 44, Graupner teaches a method as recited in claims 1, 17, 25, 31, and 42, wherein the system definition model includes knowledge describing how to deploy the system on multiple different computing devices, and wherein the knowledge includes different knowledge describing how to deploy the system on each of the multiple different computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 – 17; Col. 5, lines 17-36).

Regarding claims 7, 22, 28, 34, and 45, Graupner teaches a method as recited in claims 1, 17, 25, 31, and 42, wherein the system definition model includes constraints that must be satisfied by the one or more computing devices in order for the system to be run on the one or more computing devices (Col. 5, lines 17-36).

Regarding claims 8, 23, 29, 36, and 46, Graupner teaches a method as recited in claims 7, 22, 28, 34, and 48, wherein the system definition model can be used to check whether the constraints are satisfied by the one or more computing devices during design of the system (Col. 5, lines 17-36).

Regarding claim 9 and 35, Graupner teaches a method as recited in claims 7 and 34; wherein the system definition model can be used to check whether the constraints are satisfied by the one or more computing devices during design of the system and during management of the system (Col. 5, lines 17-36).

Regarding claims 10, 24, 30, 37, and 47, Graupner teaches a method as recited in claims 1, 17, 25, 31, and 42, wherein the system definition model includes knowledge describing how to manage the system after deployment of the system (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17).

Regarding claim 11, Graupner teaches a method as recited in claim 1, further comprising: during management of the system, using a flow to automatically propagate a configuration change to the system (Col. 8, lines 4 - 17).

Regarding claim 12, Graupner teaches a method as recited in claim 1, using another system definition model to design an environment, wherein the system is deployed to the environment on the one or more computing devices (Col. 3, lines 20 – 26);

subsequently using the other system definition model to deploy the environment one the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and

after deployment of the environment, using the other system definition model to manage the environment deployed on the one or more computing devices (Col. 4, lines 26 – 29; Col. 8, lines 4 – 17).

Graupner does not explicitly indicate the creating of the system definition model as the system is being designed.

Abu El Ata teaches a modeling system that includes modeling and simulating systems that are being designed and proposed, and prior to any deployment of the actual application and system (Col. 3, lines 39-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Graupner's system of optimization of a distributed application can also be applied to distributed application still in the design and proposition phase of development.

Regarding claim 13, Graupner teaches a method as recited in claim 12, wherein the system definition model for the environment is derived through examination of the configuration of one or more computing devices (Col. 5, lines 53 – 67).

Regarding claim 14, Graupner teaches a method as recited in claim 12, wherein the system definition model includes constraints that must be satisfied by the environment in order for the system to be run on the one or more computing devices, and wherein the other system definition model includes other constraints that must be satisfied by the system in order for the system to be run on the one or more computing devices (Col. 5, lines 17-36).

Regarding claim 15, Graupner teaches a method as recited in claim 1, wherein a plurality of environments are deployed on the one or more computing devices, the method further comprising: using a plurality of different system definition models to design each of the plurality of environments, wherein each of the plurality of environments is associated with one of the plurality of different system definition models; using, for each environment, the associated one of the plurality of different system definition models to deploy the environment; and after deployment, using, for each environment, the associated one of the plurality of different system definition models to manage the environment (Col. 5, lines 17 – 26).

Regarding claim 16, Graupner teaches a method as recited in claim 15, wherein each of the plurality of environments is layered, and wherein each of the plurality of environments serves as environment to one other of the plurality of environments or to the system (Col. 4, lines 7 – 17).

Regarding claim 38, Graupner teaches a system as recited in claim 31, wherein the system further comprises: another system definition model applicable across a lifecycle of an environment, wherein the lifecycle of the environment includes deployment of the environment, and management of the environment (Col. 4, lines 26 – 29; Col. 8, lines 4 - 17); and wherein the schema is further to dictate how functional operations within the other system definition model are to be specified (Col. 7, lines 54 - 59).

Graupner does not explicitly indicate the creating of the system definition model as the system is being designed.

Abu El Ata teaches a modeling system that includes modeling and simulating systems that are being designed and proposed, and prior to any deployment of the actual application and system (Col. 3, lines 39-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Graupner's system of optimization of a distributed application can also be applied to distributed application still in the design and proposition phase of development.

Regarding claim 39, Graupner teaches a system as recited in claim 38, wherein the system definition model for the environment is derived through examination of the configuration of one or more computing devices (Col. 5, lines 53 – 67).

Regarding claim 40, Graupner teaches a system as recited in claim 38, wherein the system definition model includes constraints that must be satisfied by the environment in order for the application to be run on the environment, and wherein the other system definition model includes other constraints that must be satisfied by the application in order for the application to be run on the environment (Col. 5, lines 17-36).

Regarding claim 41, Graupner teaches a system as recited in claim 38, wherein the system further comprises: an additional system definition model applicable across a lifecycle of an additional environment, wherein the lifecycle of the additional environment includes design of the additional environment, deployment of the additional environment, and management of the additional environment; wherein the additional environment is layered below the environment; and wherein the schema is further to dictate how functional operations within the additional system definition model are to be

Art Unit: 2456

specified (Col. 8, lines 4 – 17, where the entire model can be updated based on optimization including hardware clusters).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN BATES whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Bates/
Primary Examiner, Art Unit 2456